

CLAIMS

1. Container for maintaining a leak free environment, said container comprising:

- a package material of at least two layers fixedly attached to each other;
- 5 a fitment for maintaining the leak free environment; and
- an extending material disposed within said fitment and held in place by compression.

2. The container according to claim 1, wherein said packaging material comprises:

- a heat resistant layer;
- a strength and tear resistant layer fixedly attached to said heat resistant layer;
- a moisture and oxygen barrier layer fixedly attached to said strength and tear resistant layer; and
- 15 a sealant layer fixedly attached to said moisture barrier layer.

3. The container according to claim 2, wherein said container includes a second strength and tear resistant layer fixedly attached between said moisture barrier and said sealant layer.

4. The container according to claim 2, wherein said container includes a tie layer fixedly attached between said moisture barrier and said

sealant layer, thereby increasing the attachment between said moisture barrier and said sealant layer.

5 5. The container according to claim 1, wherein said extending material is selected from the group consisting essentially of metals, metal alloys, and polymeric and glass materials.

6. The container according to claim 2, wherein said fitment is made from a material selected from the group consisting essentially of
10 polypropylene, polyethylene, combinations thereof, and other heat sealable material.

7. The container according to claim 6, wherein said fitment includes feedthrough holes extending therethrough.
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8. The container according to claim 2, wherein said layers are heat fused using a method selected from the group consisting essentially of heat fusing with a PE laminate and fusing with a solvent based adhesive placed
20 between said layers.

9. The container according to claim 2, wherein a moisture and/or oxygen scavenging compound is in said sealant layer or is positioned between said sealant layer and barrier layer.

10. The container according to claim 9, wherein said moisture scavenging compound is selected from the group consisting essentially of a molecular sieve powder, silica, and other moisture scavenging compounds.

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11. A fitment for creating a leak proof seal in a container, said fitment comprising a heat sealable material.

12. The fitment according to claim 11, wherein said heat sealable material is selected from the group consisting essentially of polypropylene, polyethylene, combinations thereof, and other heat soluble materials.

13. The fitment according to claim 11, said fitment including feedthrough holes.

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14. The fitment according to claim 11, wherein said fitment is elliptical in shape.

15. The fitment according to claim 11, wherein said fitment is a frame.

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16. A method of making a container for containing an energy storage cell by:

forming a package material of at least two layers;
extending a metal material from the inside of the package material
through a fitment; and
thereby preventing leakage.

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17. The method according to claim 16, wherein said forming step
includes heat fusing the package material with a PE laminate.

18. The method according to claim 16, wherein said forming step
10 includes fusing the package material with a solvent based adhesive placed
between layers of said package material.